

WHAT IS CLAIMED IS:

1. A device for removing folded signatures from a saddle-back conveyor comprising:  
a moving arm;  
a first gripper mounted on the moving arm; and  
an electromechanical actuator connected to the first gripper for opening and closing the first gripper, the electromechanical actuator being mounted on the moving arm.
2. The device as recited in claim 1 further comprising a controller sending electronic signals to the electromechanical actuator for opening and closing the first gripper.
3. The device as recited in claim 1 further comprising a slip or slide contact mounted on the moving arm and electronically connected to the electromechanical actuator.
4. The device as recited in claim 1 wherein the arm is a rotating arm.
5. The device as recited in claim 4 wherein the first gripper is mounted rotatably on the rotating arm and remains in a horizontal orientation relative to a spine of the signatures during a full rotation of the rotating arm.
6. The device as recited in claim 4 further comprising a second gripper located on the rotating arm opposite the first gripper.
7. The device as recited in claim 1 wherein the first gripper has a first gripper part and a second gripper part movable with respect to the first gripper part for gripping the signature, and the electromechanical actuator includes a cylinder with a linkage

connected to the second gripper part for moving the second gripper part.

8. The device as recited in claim 7 wherein the cylinder is a pneumatic cylinder and the electromechanical actuator further includes an electronic control valve for providing air to the pneumatic cylinder.

9. The device as recited in claim 8 wherein the electronic control valve is a solenoid control valve.

10. The device as recited in claim 7 wherein the first gripper is mounted on the arm at a first axis, and the pneumatic cylinder is fed air via an air conduit entering the pneumatic cylinder at the first axis.

11. A device for removing folded signatures from a saddle-back conveyor comprising:

- a moving arm moving in a reciprocating or rotational movement;
- a first gripper mounted on the moving arm;
- an electromechanical actuator connected to the first gripper for opening and closing the first gripper, the electromechanical actuator being mounted on the moving arm; and

- a controller for providing electronic signals to the electromechanical actuator so as to direct the electromechanical actuator to open or close the first gripper during the reciprocating or rotational movement.

12. The device as recited in claim 11 further comprising an electronic slip or slide contact located on the moving arm and connected electronically to the electromechanical actuator and to the controller.

13. The device as recited in claim 11 wherein the controller is capable of setting a position of the gripper over a full range of the reciprocating or rotational movement.

14. A method for removing signatures from a saddle-back conveyor comprising the steps of:

reciprocating or rotating an arm to move a gripper to remove signatures from a saddle-back conveyor, the arm defining a range of motion; and

electronically controlling the gripper during the range of motion to open and close the gripper to grip the signature.

15. The method as recited in claim 14 further comprising adjusting a closing distance of the first gripper as a function of the signature thickness or material.

16. A signature transport device comprising:

a saddle-back conveyor; and

the device according to claim 1.